

# Author Index to Volume 9

- Aboobucker, S., 307  
 Akesson, N. B., 217, 231  
 Al-Badry, M. S., 147  
 Albrecht, R. M., 317  
 Anderson, A. D., 171  
 Anderson, J. P. E., 115, 259  
 Anderson, R. L., 53, 329  
 Arstila, A. V., 491  
 Arunachalam, S., 307  
 Aulerich, R. J., 627
- Bababunmi, E. A., 109  
 Baker, T. A., 87  
 Barker, R. J., 125  
 Bassir, O., 109  
 Baulu, P., 269  
 Bergman, H. L., 171, 543, 557  
 Bertoni, M. P., 569  
 Binaghi, C., 569  
 Bjerk, J. E., 743  
 Bleavens, M. R., 627  
 Boush, G. M., 247  
 Bowling, J. W., 683  
 Bowman, M. C., 483  
 Boyer, M. G., 269  
 Brake, J., 431  
 Brausch, J., 599  
 Brevik, E. M., 743  
 Brooke, L. T., 699  
 Browne, C., 181  
 Buhler, D. R., 99  
 Buikema, A. L., Jr., 607
- Cain, J. R., 9  
 Cairns, T., 483  
 Cajina-Quezada, M., 591  
 Call, D. J., 699  
 Castelli, M. G., 569  
 Chandra, S. V., 79, 383  
 Chiabrande, C., 569  
 Crocortie, E., 461  
 Crosby, D. G., 135  
 Culver, W. H., 281
- Dalela, R. C., 451  
 Davies, D. B., 637  
 DeFoe, D. L., 53  
 DeFouw, C., 651  
 DeGraeve, G. M., 171, 543, 557  
 Dickens, M., 579  
 Djuangshi, N., 437  
 Domsch, K. H., 115, 259  
 Dubey, M. P., 383  
 Dumont, J. N., 23, 181, 591
- Fanelli, R., 569  
 Farrier, D. S., 171
- Fiandt, J. T., 53, 329  
 Finley, M. T., 461  
 Fishbein, L., 483  
 Fowle, C. D., 269  
 Fredrickson, A. S., 217, 231  
 Freeman, S. R., 23
- Gangoli, S. D., 473  
 Garattini, S., 569  
 Geiger, D. L., 557  
 Geller, A., 289  
 Giesy, J. P., 683  
 Gilani, S. H., 17  
 Gilbert, P., 533  
 Gilchrist, K. W., 317  
 Giles, J. W., 135  
 Guiney, P. D., 579, 667  
 Gupta, S. K., 79
- Hacker, C. S., 65  
 Haseltine, S. D., 461  
 Hayden, C. M., 9  
 Hayes, R. H., 193  
 Hattula, M.-J., 491  
 Heidker, J. C., 87  
 Hester, P. Y., 431  
 Hietanen, E., 337  
 Holub, B. J., 637  
 Honig, R. A., 607  
 Hughes, D. L., 661  
 Hughes, D. N., 269  
 Hulse, M., 65  
 Hyodo, K., 437
- Jackson, T., 217, 231  
 Jeyalakshimi, K., 307
- Kania, H. J., 683  
 Kilpiö, J., 337  
 Klemmer, H. W., 715  
 Knaak, J. B., 217, 231  
 Knowles, C. O., 147  
 Korsak, R. J., 715  
 Kunzmann, M. R., 125
- Lal, R., 163  
 Lebsack, M. E., 171  
 Lehner, Y., 125  
 Lin, L. I., 349  
 Lindenbaum, A., 619  
 Lu, Po-Yung, 699
- Maddy, K. T., 217, 231  
 Mahoney, J. S., 65  
 Marano, M., 17  
 Marathe, M. R., 473  
 Marazza, V., 569  
 Martelli, G. P., 569
- Matsumura, F., 247  
 Mazmudar, R. M., 473  
 Mercier, M., 533  
 Metcalfe, C. D., 507  
 Meyer, J. S., 557  
 Miller, C. S., 281  
 Moretti, E. S., 619  
 Morgan, G. W., 431  
 Morgan, D. P., 349  
 Mori, T., 415, 519
- McFarland, V. A., 733  
 McLane, M. A. R., 661  
 McLeese, D., 1, 507, 675
- Närhi, M., 337  
 Nosedá, A., 569
- Oberg, S. G., 393  
 Oehme, F. W., 193  
 Oller, W. L., 483  
 Olurunso, O. O., 109  
 Olson, K. L., 247  
 Overcast, R. L., 543
- Papst, M. H., 269  
 Pardini, R. S., 87  
 Parker, R. D. R., 393  
 Paschal, D. C., 9  
 Payne, B., 87  
 Peddicord, R. K., 733  
 Penumathy, L., 193  
 Peterson, R. E., 317, 579, 667  
 Pezza, F., 569  
 Pezzack, D., 1, 507, 675  
 Pfaffli, P., 727  
 Phillips, G. R., 99  
 Pickering, Q. H., 405  
 Pier, S. M., 65  
 Poncelet, F., 533
- Quadros, F., 473
- Rani, S., 451  
 Rao, R. R., 473  
 Rashad, N. M., 715  
 Ray, S., 1, 675  
 Rees, G. A. V., 269  
 Reichert, E. L., 715  
 Ringer, R. K., 627  
 Rivera, L., 231  
 Roos, A., 491
- Saikaly, H. H., 349  
 Saint-Ruf, G., 533  
 Sastry, K. V., 425  
 Sato, M. M., 715  
 Savolainen, H., 337, 727

Saxena, D. M., 163  
Schoor, W. P., 599  
Schroeder, G. D., 65  
Schultz, T. W., 23, 591  
Seefeld, M. D., 317  
Sharma, K., 425  
Sharma, R. P., 393  
Shukla, G. S., 79, 383  
Sikes, C. V., 431  
Soemarwoto, O., 437  
Sorensen, E. M., 619  
Spehar, R. L., 53

Srivastava, R. S., 79  
Sugatt, R. H., 41, 207  
Suzuki, K. T., 415, 519  
Suzuki, S., 437

Thaxton, P., 431

Vainio, H. 337  
Verma, S. R., 451  
Virtanen, M. T., 491

Waiwood, B. A., 675  
Walbridge, C. T., 329  
Ware, G. W., 135  
Weaver, C. M., 651  
Wong, L., 715

Yamamura, M., 415, 519

Zabik, M. E., 651

## Subject Index to Volume 9

- Abate®, *See* Temephos  
Acarol®, *See* Bromopropylate  
Acetylcholinesterase  
  activity in shrimp, inhibition by methyl  
  parathion and its oxon, 599  
  and dietary diazinon in the rat, 637  
Acridine  
  toxicity of, to *Tetrahymena*, 594  
Alfalfa  
  honey bees and dimethoate contamination,  
  125  
Algae  
  accumulation of cadmium in, 9  
  effects of an artificial refinery mixture on,  
  613  
Aminocarb  
  effects of, on mitochondrial transport sys-  
  tems, 87  
Ammonia  
  effects of, on *Daphnia* and fish, 548  
Aquatic Insects  
  survival of, exposed to cadmium, copper,  
  lead, and zinc, 329  
Arsenic  
  effects of compounds on fish and inverte-  
  brates, 53  
o-Arsenic acid  
  exposure of workers to, 281  
Atrazine  
  degradation of, by bacteria, 289  
Azinphosmethyl  
  effect of, on diallate-triallate degradation,  
  115  
Bacteria  
  degradation of atrazine by, 289  
Baygon®, *See* propoxur  
Beef  
  polybrominated biphenyls in raw and  
  cooked, 651  
Bentazon  
  effect of, on diallate-triallate degradation,  
  115  
p-benzoquinone  
  toxicity of, to fish, 562  
Birds  
  Cadmium in, 65  
  lead in, 65  
  manganese in, 65  
Bromopropylate  
  effects of, on mitochondrial transport sys-  
  tems, 87  
Buffalo  
  effects of monocrotophos on, 473  
Cadmium  
  accumulation of, in worms, 1  
  accumulation of, in algae, 9  
  in birds, 65  
  in healthy swine, cattle, dogs, and horses,  
  193  
  survival of aquatic insects exposed to  
  binding proteins in worms, 329, 415, 519  
  in Java rice, 437  
  in shrimp, 675  
  in crayfish, 683  
Carbaryl  
  effects of, on mitochondrial transport sys-  
  tems, 87  
  effects of, on catfish, 307  
Carbazole  
  toxicity of, to *Tetrahymena*, 594  
Carbofuran  
  effects of, on mitochondrial transport sys-  
  tems, 87  
Cat  
  2,3,7,8-tetrachlorodibenzo-p-dioxin in, 573  
Catechol  
  toxicity of, to fish, 561  
Cattle  
  lead, cadmium, and mercury in healthy,  
  193  
  effects of monocrotophos on, 473  
  2,3,7,8-tetrachlorodibenzo-p-dioxin in, 573  
Chelation therapy for lead in mice, 619  
Chickens  
  nickel poisoning in, 17  
  mercury toxicity in, 431  
  effects of monocrotophos in, 473  
  2,3,7,8-tetrachlorodibenzo-p-dioxin in, 573  
Chlorobenzaldehyde  
  from DDA, 135  
Chlorobenzilate  
  effects of, on mitochondrial transport sys-  
  tems, 87  
Chloropropylate  
  effects of, on mitochondrial transport sys-  
  tems, 87  
Chlorcholinchloride  
  effect of, on diallate-triallate degradation,  
  115  
p-Chlorophenol  
  effects of, on mitochondrial transport sys-  
  tems, 87  
  from DDA, 135  
Cholinchloride  
  effect of, on diallate-triallate degradation,  
  115  
Chlorpyrifos  
  effect of, on diallate-triallate degradation,  
  115  
  persistence in ponds, 269  
Chlorpyrifos methyl  
  persistence of, in ponds, 269  
Chromium  
  toxicity of, to the fathead minnow, 405  
Clam  
  effect of kaolinite on, 736

- Clay  
  lethality of, to marine and estuarine macrofauna, 733
- Cobaltous chloride  
  treatment on 2-methylnaphthalene disposition and hepatic cytochrome P-450 content in carp, 579
- Copper  
  effects of, on mice, 79  
  survival of aquatic insects exposed to, 329  
  in Java rice, 437
- Cotton  
  degradation of monocrotophos on leaves, 480
- Crab  
  DDE, PCBs, and hexachlorobenzene in, 743  
  pentachlorobenzene in, 747
- Crayfish  
  Cadmium and Zinc in, 683
- m*-cresol  
  toxicity of, to *Daphnia* and fish, 562
- o*-cresol  
  toxicity of, to *Daphnia* and fish, 562
- p*-cresol  
  toxicity of, to *Daphnia* and fish, 561
- Daphnia*  
  selenium in, 23  
  toxicity of coal condenser water to, 543  
  effects of ammonia on, 548  
  effects on phenols on, 548, 557
- Di-allate  
  microbial degradation of, 115  
  degradation of, in soil, 259
- Diazinon  
  toxicology of dietary, in rat, 637
- Dichlorobenzophenone  
  effects of, on mitochondrial transport systems, 87  
  from DDA, 135
- DDA  
  effects of, on mitochondrial transport systems, 87  
  photo decomposition of, 135
- DDE  
  effects of, on mitochondrial transport systems, 87  
  in fish and invertebrates, 743
- DDT  
  effects of, on mitochondrial transport systems, 87  
  effect of, on cell growth, 163  
  model ecosystem with, 491
- 2,4-D  
  effect of, on diallate-triallate degradation, 115
- Dichlorprop  
  effect of, on diallate-triallate degradation, 115
- Dicofol  
  effects of, on mitochondrial transport systems, 87
- Diethylenetriaminepentaacetate  
  to remove lead from mice, 619
- Dihydroxynaphthalene  
  effects of, on mitochondrial transport systems, 87
- Dimethoate  
  effect of, on diallate-triallate degradation, 115  
  and honey bee contamination, 125
- 1,2-Dimethyl indole  
  toxicity of, to *Tetrahymena*, 594
- 2,6-Dimethyl pyridine  
  toxicity of, to *Tetrahymena*, 594
- 2,6-Dimethyl quinoline  
  toxicity of, to *Tetrahymena*, 594
- Dimetilan  
  effects of, on mitochondrial transport systems, 87
- Dinitrophenol  
  effects of, on fish, 451
- Dinoseb acetate  
  effect of, on diallate-triallate degradation, 115
- Dogs  
  lead, cadmium, and mercury in health, 193
- Donkey  
  2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Ducks  
  effects of toxaphene in, 461  
  2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Dursban®, *See* Chlorthrifos
- Ethylenediaminetetraacetate  
  to remove lead from mice, 619
- Ferrets  
  effects of PCBs on, 627
- Fish  
  effects of sodium, dichromate on, 41, 207  
  effects of arsenic compounds on, 53  
  mercury in, 99  
  toxicity of oil shale process water to, 171  
  toxic effects of carbaryl on, 307  
  toxicity of chromium to, 405  
  effects of mercuric chloride on, 425  
  effects of phenol and dinitrophenol in, 451  
  toxicity of coal condenser water to, 543  
  toxicity of ammonia to, 548  
  toxicity of phenols to, 548, 557, 699  
  disposition of 2-methylnaphthalene in, 579  
  effects of PCBs on, 667  
  effect of kaolin on, 739  
  DDE in, 743  
  PCBs in, 743  
  pentachlorobenzene, hexachlorobenzene, and octachlorostyrene in, 743
- Furadan®  
  *See* carbofuran
- Genetic effects of chlorinated anilines and azobenzenes on *S. typhimurium*, 533
- Goat  
  2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573

- Grass  
  degradation of monocrotophos on, 480
- Guinea pig  
  2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Hazardous chemicals  
  proposed toxicological index, 483
- n*-Heptane  
  neurochemical effects of, on rats, 727
- Hexachlorobenzene  
  in fish and invertebrates, 743
- Honey bees  
  and dimethoate contamination, 125
- Horses  
  lead, cadmium, and mercury in healthy, 193  
  2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Housefly  
  phthalate-organophosphate interactions in the, 147
- Hydroquinone  
  toxicity of, to *Daphnia* and fish, 562
- Indole  
  toxicity of, to *Tetrahymena*, 594
- Invertebrates  
  effects of arsenic compounds on, 53
- Iron  
  effects of, on mice, 79
- Isopods  
  effect of kaolinite on, 736
- Kaolinite  
  lethality of, on marine and estuarine macrofauna, 733
- Kelthane®, *See* Dicofol
- Lead  
  in birds, 65  
  in healthy swine, cattle, dogs, and horses, 193  
  survival of aquatic insects exposed to, 329  
  effects of, on rabbits, 337  
  chelation therapy for, in mice, 619
- Leptophos  
  effects of, on mitochondrial transport systems, 87
- Manganese  
  in birds, 65  
  effects of, in mice, 79  
  effects of, in rats, 383
- Matacil®, *See* aminocarb
- Mercuric chloride  
  effects of, on brain enzymes of fish, 425
- Mercury  
  accumulation in rainbow trout, 99  
  in healthy swine, cattle, dogs, and horses, 193  
  effects of, on chickens, 431
- Methylnaphthalene  
  effects of  $\text{CoCl}_2$  on removal of, from carp, 579
- Methyl paraoxon  
  inhibition of acetylcholinesterase activity by, in shrimp, 599
- Methyl parathion  
  inhibition of acetylcholinesterase activity by, in shrimp, 599
- 3-Methyl pyridine  
  toxicity of, to *Tetrahymena*, 594
- 2-Methyl quinoline  
  toxicity of, to *Tetrahymena*, 594
- Mexacarbate  
  effects of, on mitochondrial transport systems, 87
- Mice  
  effects of metals on, 79  
  effects of Vanadium on, 393  
  chelation therapy for lead in, 619
- Mink  
  effects of PCBs on, 627
- Mitochondrial electron transport  
  effects of pesticides on, 87  
  effects of *N*-(phosphonomethyl)glycine on, 109
- Monocrotophos  
  effects of, to cattle, chickens, buffaloes, and human volunteers, 473  
  degradation of, in cotton and grass, 478  
  degradation of, in soil and water, 479
- Mussel  
  effect of kaolinite on, 736  
  DDE, PCBs, and hexachlorobenzene in, 743  
  pentachlorobenzene in, 747
- 1-Naphthol  
  effects of, on mitochondrial transport systems, 87
- Nickel  
  poisoning in chick embryos, 17
- p*-Nitrophenol  
  effects of, on fish, 699
- Nuvacron®, *See* monocrotophos
- Octachlorostyrene  
  in fish and invertebrates, 743
- Oil shale process water  
  toxicity of, to trout and minnows, 171
- Organochlorine compounds in aquatic environments, 743
- Owls  
  effects of PCBs on, 661
- PCBs *See* polychlorobiphenyls
- Pentachlorobenzene  
  in fish and invertebrates, 743
- Pentachlorophenol  
  effects of, to exposed workers, 715
- Pesticide workers  
  Safety effectiveness of pesticide equipment, 217, 231  
  exposure of, to arsenic acid, 281  
  occupationally exposed to pesticides, 349  
  exposed to monocrotophos, 473  
  exposed to pentachlorophenol, 715

- Pheasant**  
 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 573
- Phenol**  
 effects of, on fish, 451, 543, 557, 699  
 effects of, on *Daphnia*, 548, 557
- N-(phosphonomethyl)glycine**  
 interaction of, with corn shoot enzymes, 109
- Phosvel®. See Leptophos**
- Phthalates**  
 toxicity of, to house flies, 147
- Phthalate-organophosphate interactions in the house fly**, 147
- Polybrominated biphenyls**  
 in raw and cooked beef, 651
- Polychlorobiphenyls**  
 uptake of, by worms and shrimp, 507  
 effects of, on ferrets and mink, 627  
 effects of, on owls, 661  
 in yellow perch and trout, 667  
 in fish and invertebrates, 743
- Propoxur**  
 effects of, on mitochondrial transport systems, 87
- Pyrazon**  
 effect of, on diallate-triallate degradation, 115
- Pyridine**  
 toxicity of, to *Tetrahymena*, 594
- Pyrrole**  
 toxicity of, to *Tetrahymena*, 594
- Quinoline**  
 toxicity of, to *Tetrahymena*, 594
- Rabbits**  
 tests for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 317  
 effects of lead on, 337  
 toxic effects of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 569
- Rats**  
 behavioral effects of toxaphene and toxic components A and B on, 247  
 tests for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 317  
 effects of manganese on, 383  
 cadmium-binding proteins in, 519  
 genetic effects of anilines and azobenzenes on, 533  
 toxicity of dietary diazinon in, 637  
 effects of *n*-heptane on, 727
- Refinery effluent standards**, 607
- Reldan®. See Chlorpyrifos methyl**
- Resorcinol**  
 toxicity of, to *Daphnia* and fish, 561
- Rice**  
 cadmium, copper, and zinc in, produced in Java, 437
- Salmonella typhimurium**  
 genetic effects of anilines and azobenzenes on, 533
- Sea urchin**  
 effect of kaolinite on, 736
- Seawater**  
 uptake of cadmium by worms from, 1
- Sediment**  
 uptake of cadmium by worms from, 1  
 uptake of PCBs from, by worms and shrimp, 507  
 lethality of, to marine and estuarine macrofauna, 733  
 DDE, PCBs, and hexachlorobenzene in, 743  
 octachlorostyrene in, 746  
 pentachlorobenzene in, 747
- Selenium**  
 in *Daphnia*, 23  
 effects of sodium selenite on tadpoles, 181
- Shrimp**  
 uptake of PCBs by, 507  
 inhibition of acetylcholinesterase by methyl parathion and its oxon, 599  
 cadmium and zinc in, 675  
 effect of kaolinite on, 737  
 DDE, PCBs, and hexachlorobenzene in, 743
- Snail**  
 effect of kaolinite on, 736  
 pentachlorobenzene in, 747
- Sodium dichromate**  
 effects of, on Coho salmon, 41, 207
- Soil**  
 degradation of monocrotophos in, 479  
 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in, 570
- Swine**  
 lead, cadmium, and mercury in healthy, 193
- Tadpoles**  
 effects of sodium selenite on, 181
- Temephos**  
 persistence of, in ponds, 269
- 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin**  
 tests for, in rats and rabbits, 317  
 genetic effects of, 533  
 toxic effects of, in animals, 569  
 in soil, 570
- Tetrahymena pyriformis***  
 effects of nitrogenous heterocyclic compounds on, 591
- Thiophanate**  
 effect of, on diallate-triallate degradation, 115
- Toxaphene**  
 behavioral effects of, on rats, 247  
 effects of, in ducks, 461
- Toxicity of coal gasification condenser water on aquatic biota**, 543
- Toxicity of phenolic compounds to aquatic biota**, 557
- to fat head minnows, 699
- Toxicity-structure relationships of nitrogenous heterocyclic compounds**, 591

- Toxicological risk assessment procedure:  
  proposal, 483
- Tri-allate  
  microbial degradation of, 115  
  degradation of, in soil, 259
- TDE  
  effects of, on mitochondrial transport systems, 87
- 2,4,5-Trichlorophenol  
  effects of, on fish, 699
- 2,4,5-T  
  effect of, on diallate-triallate degradation, 115
- Tridemorph  
  effect of, on diallate-triallate degradation, 115
- Tunicates  
  effect of kaolinite on, 736
- Vanadium  
  effects of, on mice, 393
- Water  
  degradation of monocrotophos in, 479  
  toxicity of coal gasification condenser, to aquatic biota, 543
- Worms  
  cadmium in, 1  
  cadmium-binding proteins in, 415, 519  
  uptake of PCBs by, 507  
  DDE, PCBs, and hexachlorobenzene in, 743
- Zectran®, *See* Mexacarbate
- Zinc  
  survival of aquatic insects exposed to, 329  
  in Java rice, 437  
  in shrimp, 675  
  in crayfish, 683